

WHAT IS CLAIMED IS:

1. A method for distributing an image-recording medium, the method comprising the steps of:
 - (a) encoding an identifying mark within a recorded image area on the image-recording medium;
 - (b) associating a tracking memory having tracking information with the image-recording medium with the tracking memory having tracking information stored therein;
 - (c) distributing the image-recording medium to users of the image-recording medium; and,
 - (d) reading the tracking information from the tracking memory and storing the tracking information in a database that associates the users to whom the image-recording medium has been distributed with the identifying mark recorded in the image area.
2. The method of claim 1 wherein the step of encoding said identifying mark comprises the step of steganographically encoding information content in a form that is not readily perceptible to an unaided human viewer.
3. The method of claim 1 wherein the step of associating tracking information with said tracking memory comprises associating a radio frequency transponder with the image-recording medium.
4. The method of claim 3, wherein said image-recording medium comprises a photographic film stored on a film core and wherein the step of associating a radio frequency transponder comprises the step of attaching said radio frequency transponder having tracking information stored therein to the film core.

5. The method of claim 3, wherein said image-recording medium comprises a photographic film stored on a film core and wherein the step of associating a radio frequency transponder comprises transferring the photographic film to a film core having a radio frequency transponder with tracking information stored therein.

6. The method of claim 3, wherein the image-recording medium is stored in packaging during distribution and wherein the tracking memory is joined to the packaging.

7. The method of claim 1, wherein the step of associating tracking information with the recording medium comprises the step of physically associating a label having markings thereon to the image-recording medium, said markings being representative of the tracking information.

8. The method of claim 7, wherein the markings are in human readable form.

9. The method of claim 7 wherein the markings are in machine readable form.

10. The method of claim 1 wherein the step of associating tracking information with the image-recording medium comprises the step of associating a magnetic strip having electromagnetically encoded tracking information recorded thereon.

11. The method of claim 1 wherein the step of associating said tracking information with the image-recording medium comprises the step of associating an external data storage device with the image-recording medium.

12. The method of claim 1 further comprising the steps of detecting an identifying mark contained on a copy of an image contained within a recorded image area on the image-recording medium, accessing the database and determining therefrom the users to whom the image-recording medium containing the identifying mark was distributed.

13. The method of claim 1, wherein the step of encoding an identifying mark comprises the step of exposing a latent image onto the image-recording medium.

14. The method of claim 1 wherein the step of encoding an identifying mark comprises encoding more than one identifying mark on the image-recording medium.

15. The method of claim 14, wherein the image-recording medium has more than one segment with each segment having a different identifying mark and wherein each different identifying mark is associated with tracking information so that the tracking information can be determined from any of the identifying marks.

16. The method of claim 16 wherein the step of associating a second memory with the image-recording medium comprises physically coupling said second memory to the image-recording medium and emitting an electromagnetic signal having tracking information therein, said image-recording medium being received by the second memory and stored therein.

17. A method for distributing an image-recording medium, the method comprising the steps of:

encoding an identifying mark into an image bearing segment of an image-recording medium to form a marked image-recording medium;

storing the marked image-recording medium using a first packaging having a first memory;

storing tracking data in the first memory from which the identifying mark on the image bearing segment of the marked image bearing recording medium can be used to determine information about the distribution of the marked image-recording medium,

recording an image onto the marked image-recording medium, to form an image-recording medium;

storing the image-recording medium using second packaging having a second memory;

reading tracking data from said first memory;

storing information in the second memory from which the markings on the imaged recording medium can be used to determine information about the distribution of the marked image-recording medium.

18. The method of claim 17, further comprising the steps of :

developing said imaged image-recording medium to form a printed imaged recording medium; and,

storing the printed imaged recording medium on a third packaging having a third memory;

reading data from said second memory; and

storing information from which the markings on the imaged recording medium can be used to determine information about the distribution of the imaged recording medium.

19. The method of claim 18, further comprising the steps of :

distributing said printed image-recording medium to an exhibitor;

reading tracking information from the third memory; and

using the tracking information to store information from which the markings on the imaged recording medium can be used to determine information about the distribution of the imaged recording medium.

20. The method of claim 17 wherein the step of encoding said identifying mark comprises the step of exposing a watermark pattern onto a portion of said image-recording medium.

21. The method of claim 17 wherein the step of storing the marked image-recording medium using a first packaging having a first memory comprises storing the marked image-recording medium using a wrapping and associating a transponder with the wrapping.

22. The method of claim 17 wherein the step of storing the marked image-recording medium using a first packaging having a first memory comprises the steps of storing the image-recording medium on a reel and associating a transponder with the reel.

23. The method of claim 17 wherein the step of storing the marked image-recording medium using a first packaging having a first memory comprises the steps of storing the marked image-recording medium on a core and associating a transponder with the core.

24. The method of claim 17 wherein the step of encoding said identifying mark comprises the step of forming steganographically encoded image data.

25. The method of claim 17 wherein the tracking information is stored in a server computer.

26. The method of claim 25 wherein said server manages a database.

27. The method of claim 17 wherein said identifying mark comprises a multi-bit identifier.

28. The method of claim 17 wherein the image-recording medium is a photosensitive medium.

29. The method of claim 17 wherein the step of encoding said identifying mark comprises the step of forming a latent image onto the image-recording medium.

30. The method of claim 17 wherein the step of coupling said first memory to said unmarked image segment comprises the step of affixing a bar code label.

31. The method of claim 17 wherein the step of coupling said first memory to said unmarked image segment comprises the step of scanning an optical encoding.

32. The method of claim 17 wherein the step of coupling said first memory to said unmarked image segment comprises the step of scanning a magnetic encoding.

33. A method for tracing the source of an illegal copy of a motion picture, the method comprising the steps of:

(a) encoding an identifying mark onto a segment of an image-recording medium to form a marked segment of said image-recording medium, said identifying mark associated with a data location in a memory, said memory coupled to said marked segment of said image-recording medium, said data location comprising data identifying said marked segment;

(b) extracting said identifying mark from said marked segment of the illegal copy;

(c) decoding said encoded identifying mark to obtain said data location; and

(d) accessing said memory to obtain data stored at said data location.

34. An image-recording medium comprising:

(a) a segment of an image receiving surface having an identifying mark encoded thereon; and

(b) a tracking memory coupled to the medium, said memory having data stored thereon corresponding to said identifying mark.

35. An image-recording medium according to claim 34 wherein said identifying mark comprises a steganographic encoding.

36. An image-recording medium according to claim 34 wherein a radio frequency transponder comprises said memory.

37. An image-recording medium according to claim 34 wherein said memory is optically encoded.

38. An image-recording medium according to claim 34 wherein said memory is magnetically encoded.

39. An image-recording medium according to claim 34 wherein said memory is affixed to a film core.

40. An image-recording medium according to claim 34 wherein said memory is affixed to a film reel.

41. An image-recording medium according to claim 34 wherein the image-recording medium is photosensitive.